

Serial No. 09/743,621 Docket No. C0003/7030
Title: OPTICAL DEVICES
Applicant: Peter Ho et al.

By: JW

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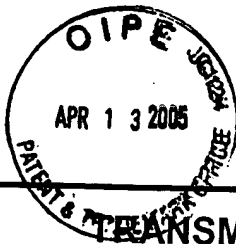
MAILED: April 4, 2005



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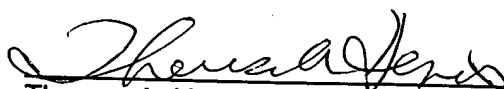
TRANSMITTAL LETTER		Docket No. C0003/7030
Applicant:	Peter Ho et al.	
Serial No:	09/743,621	
Filed:	April 9, 2001	
For:	OPTICAL DEVICES	
Examiner:	Edward J. Cain	
Art Unit:	1714	

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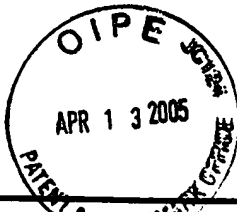
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Enclosures

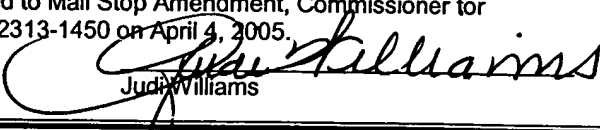
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Therese A. Hendricks, Esq., Reg. No. 30,389
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Date: April 4, 2005



INFORMATION DISCLOSURE STATEMENT		Docket No. C0003/7030
Applicant:	Peter Ho et al.	
Serial No:	09/743,621	
Filed:	April 9, 2001	
For:	OPTICAL DEVICES	
Examiner:	Edward J. Cain	
Art Unit:	1714	

<p style="text-align: center;">CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)</p> <p>The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 4, 2005.</p> <p style="text-align: right;"> Judith Williams</p>
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Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
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In keeping with the duty of candor and good faith owed to the Patent and Trademark Office, Applicant wishes to bring information to the attention of the Examiner. The filing of this statement shall not be construed as a representation that a search has been made or as an admission that this information is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

Enclosures

- ☒ A form PTO-1449 listing this information is attached
Copies of documents cited, other than U.S. patents and published U.S. patent applications, are enclosed.
- ☐ Copies of the cited documents are not enclosed because

Fees

- ☐ This statement is filed before the later of (1) three months of (i) the filing of a national application or (ii) the entry date for the national stage of an international application or (2) the mailing date of a first office action on the merits. No fee is due.
- ☐ This statement is filed before the mailing date of a final office action, a notice of allowance or an action that otherwise closes prosecution, and
- ☐ The submission fee of \$180.00 under 37 CFR §1.17(p) is enclosed, or
- ☐ The following certification is made:
- ☐ each item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement, or

- ☐ no item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in this statement was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.
- ☒ This statement is filed on or before payment of the issue fee, the submission fee of \$180.00 under 37 CFR §1.17(p) is enclosed, *and*
- ☒ each item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement, or
- ☐ no item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in this statement was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

Payment

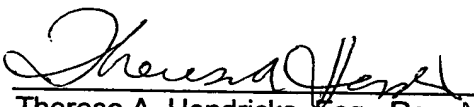
- ☒ A check in the amount of the submission fee is enclosed.
- ☐ Charge Account No. 02-3038 in the amount of the submission fee. A duplicate of this transmittal sheet is attached.

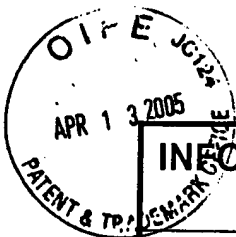
Authorization to Charge Additional Fees

- ☒ The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. §1.16 and §1.17 required by the attached paper and during the entire pendency of this application to Account No. 02-3038.

Respectfully submitted,

Date: April 4, 2005


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**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT Sheet 2 of 2**

Docket No. C0003/7030

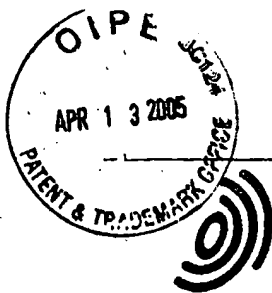
Applicant: Peter Ho et al.
Serial No: 09/743,621
Filed: April 9, 2001
For: OPTICAL DEVICES
Examiner: Edward J. Cain
Art Unit: 1714

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OTHER PRIOR ART – NON PATENT LITERATURE AND DOCUMENTS

Exam Inits	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the articles (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		Copy of Communication pursuant to Article 96(2) EPC, mailed 4 March 2005, from the European Patent Office in corresponding Application No. 99 933 046.7-2111	<input type="checkbox"/>
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Examiner Signature		Date Considered	
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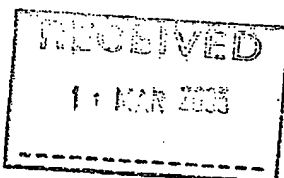
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Formalities Officer / Assistant
(Formalities and other matters) +49 89 2399-7849



IA

Application No. 99 933 046.7 - 2111	Ref. 200727 / PRS	Date 04.03.2005
Applicant Cambridge Display Technology Limited		

Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

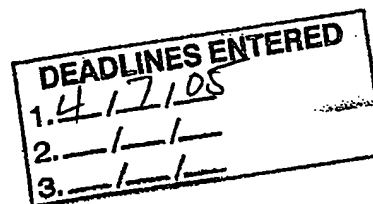
Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



DIARY
UPDATED

Mayne, J
Primary Examiner
for the Examining Division

Enclosure(s): 3 page/s reasons (Form 2906)
US-5579429





Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

Datum
Date 04.03.2005
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1

Anmelde-Nr.:
Application No.: 99 933 046.7
Demande n°:

The examination is being carried out on the following application documents:

Description, Pages

1, 2, 7, 9-28	as published			
3, 8	received on	22.03.2002	with letter of	20.03.2002
4	received on	07.11.2002	with letter of	04.11.2002
4a, 5, 6	received on	13.02.2004	with letter of	12.02.2004

Claims, Numbers

1-22	received on	13.02.2004	with letter of	12.02.2004
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Drawings, Sheets

1/22-22/22	as published
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- I The following document is cited by the examiner (see the Guidelines, C-VI, 8.7). A copy of the document is annexed to the communication and the numbering will be adhered to in the rest of the procedure:

D4 US-5,579,429

- II The present application does not meet the requirements of Article 52(1) EPC, because the subject-matter of independent claims 20 and 22 is not new in the sense of Article 54(1) and (2) EPC.

1. Independent claim 20 is directed towards a polymer body containing nanoparticles. The polymer body is said to contain a substantially uniform dispersion of nanoparticles. The remaining features of the claim relate to how the body was made and how the solution of nanoparticles was formed.

Independent claim 22 is directed towards a polymer body comprising a substantially uniform dispersion of nanoparticles. The remaining features of the claim relate to how the nanoparticles were formed.

Claims for products defined in terms of a process of manufacture are admissible only



Datum
Date 04.03.2005

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Sheet 2
Feuille

Anmelde-Nr.:
Application No.: 99 933 046.7
Demande n°:

if the products as such fulfill the requirements for patentability (Guidelines, C-III, 4.7b).

2. D4 is concerned with a fluorescent optical fibre prepared from a polymer. The polymer is prepared from a monomer or mix of monomers, i.e. a polymer precursor material (col. 6, l. 21-36, col. 9, l. 5-40 and Fig. 2). TiO_2 nanoparticles can be added to the polymer precursor material (col. 9, l. 41-54 and Fig. 2). The polymer precursor material is subsequently polymerised (Fig. 2, stage 61 and col. 11, l. 5 ff.). D4 takes certain precautions to ensure a uniform distribution of nanoparticles in the final product (col. 9, l. 56 - col. 10, l. 5).

Hence no difference can be seen between the product of D4 and the subject matter of independent claims 20 and 22.

III The application is open to objections under Article 84 EPC.

1. It is not entirely clear what is meant by "substantially uniform dispersion" in claims 20 and 22. It could, for example, mean that the nanoparticles do not have a broad distribution of particle size. It could also relate to the spacing arrangement of the nanoparticles within the polymer. In the latter case it is not clear how exactly "substantially uniform" should be interpreted.
2. In claim 22 one of the features is "the nanoparticles being formed by a method according to any of claims 1-20". This renders claim 22 unclear. Claim 20 is an independent claim directed towards a polymer product and not a method of forming nanoparticles. The method of claim 1 is directed towards preparing nanoparticles for use and not to the formation of nanoparticles themselves. There is no information in claim 1 as to how to form nanoparticles. The result after performing the method of claim 1 is "a solution of nanoparticles disaggregated in the solvent".
3. According to claim 1 the method of preparing the nanoparticles for use comprises washing the mixture of nanoparticles and another material with a solvent to remove the other material and form a solution of nanoparticles disaggregated in the solvent. According to the Applicant in the telephone conversation of 17.3.04 the step of treating the nanoparticles with methanol to remove AOT or inorganic chlorides and forming an optically clear dispersion of nanoparticles in methanol as seen in the examples (p. 12-15) is the part of the process which corresponds to the subject matter of claim 1.



Bescheld/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

Datum
Date 04.03.2005
Date

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Sheet 3
Feuille

Anmelde-Nr.:
Application No.: 99 933 046.7
Demande n°:

However, according to p. 13 (2nd paragraph) and p. 15 (2nd paragraph) the nanoparticles are separated from AOT or inorganic chlorides by dialysis with methanol. Washing and dialysis are not the same concept. Claim 1 is therefore insufficiently supported by the description.

4. The problem of lack of antecedent basis with claim 17, as raised in the telephone conversation of 15.3.04, still needs to be overcome.

- IV The Applicant is requested to file new claims which take account of the above comments. Failure to overcome all the objections raised will lead to refusal of the application, Article 97(1) EPC.

CHANGE OF CORRESPONDENCE ADDRESS	Docket No. C0003/7030
Applicant: Peter Ho et al. Serial No: 09/743,621 Filed: April 9, 2001 For: OPTICAL DEVICES Examiner: Edward J. Cain Art Unit: 1714	

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Please change the correspondence address for the above-identified application to the address of customer number

21127

Respectfully submitted,



Date: April 4, 2005

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